

Government City College (A) Nayapul, Hyderabad



Affiliated to Osmania University Accredited with B⁺⁺ Grade & CGPA 2.76

PROGRAMME SPECIFIC OUTCOMES LIFE SCIENCES & APPLIED SCIENCES

	SCIENCES & APPLIED SCIENCES
PSG Botany- Bio-Chemistry- Bio-Technology PSG	collecting relevant information about the plants, so as to recognize their position in the classification systems and at phylogenetic level, Will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms, will be able to explain how Plants function at gene, genome, cellular and tissue level, relate the physical features of the environment to the structure of populations, communities, and ecosystems, Will be able to conceive the idea of artificial propagation of plants via vegetative methods and to find a livelihood via establishing miniature plant nurseries. Will be able to demonstrate an understanding of fundamental biochemical principles such as structure and function of biomolecules, metabolic pathways, acquire basic knowledge on fundamentals of microbiology, enzymology, immunology, molecular biology, endocrinology and genetic engineering, get equipped with the basic biochemical tools and standard operation procedures and will be able to use in institutes wherever necessary, will develop analytical thinking in execution of biochemical experiments and data interpretation. Understand the basic life processes, metabolic activities, and handling of equipment, identification of appropriate
PS	understanding of molecular & immunologic responses, awareness of useful/harmful agents & its impact on human genome, Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Bio-chemists/Horticulture/ Miniature plant nurseries/Mushroom cultures etc.
Botany- Bio-Chemistry- Chemistry	Acquire critical evaluation of ideas and arguments by collecting relevant information about the plants, so as to recognize their position in the classification systems and at phylogenetic level, will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms, will be able to explain how Plants function at gene, genome, cellular and tissue level, relate the physical features of the environment to the structure of populations, communities, and ecosystems, Will be able to conceive the idea of artificial

	<u></u>
PSO2	propagation of plants via vegetative methods and to find a livelihood via establishing miniature plant nurseries. Will be able to demonstrate an understanding of fundamental biochemical principles such as structure and function of biomolecules, metabolic pathways, acquire basic knowledge on fundamentals of microbiology, enzymology, immunology, molecular biology, endocrinology and genetic engineering, get equipped with the basic biochemical tools and standard operation procedures and will be able to use in institutes wherever necessary, will develop analytical thinking in execution of biochemical experiments and data interpretation. Gain the knowledge of Chemistry through theory and practicals: able to explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions; identify chemical formulae and solve numerical problems; use modern chemical tools, models, chem-draw, charts, and equipment; know structure-activity relationship; Understand good
PS04	laboratory practices and safety; Develop research- oriented skills, Make aware and handle the sophisticated instruments/equipment Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Bio-chemists/Horticulture/ Miniature plant nurseries/Mushroom cultures etc.
PSO1	Acquire critical evaluation of ideas and arguments by collecting relevant information about the plants, so as to recognize their position in the classification systems and at phylogenetic level, will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms, will be able to explain how Plants function at gene, genome, cellular and tissue level, relate the physical features of the environment to the structure of populations, communities, and ecosystems, Will be able to conceive the idea of artificial propagation of plants via vegetative methods and to find a livelihood via establishing miniature plant nurseries. Gain the knowledge of Chemistry through theory and practicals: able to explain nomenclature, stereochemistry, structures, reactivity and mechanism of
PSO3	the chemical reactions; identify chemical formulae and solve numerical problems; use modern chemical tools, models, chem-draw, charts and equipment; know structure-activity relationship; Understand good laboratory practices and safety; Develop research-oriented skills, Make aware and handle the sophisticated instruments/equipment Will be able to demonstrate an understanding of fundamentals of biochemistry, acquire basic knowledge on structure, composition, nutritive value of various foods, understand the basics of meal planning and special diets based on the conditions of diseases, get

Botany- Chemistry- Applied Nutrition	PSO4	equipped with the basic knowledge of clinical Dietetics, hospital administration, food hygiene and will be able to use in institutes wherever necessary, will develop analytical thinking in diet calculations and preparation of therapeutic diets. Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Horticulture/ Miniature plant nurseries/ Mushroom cultures/Clinical Dietetics etc.
	PSO1	Acquire critical evaluation of ideas and arguments by collecting relevant information about the plants, so as to recognize their position in the classification systems and at phylogenetic level, will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms, will be able to explain how Plants function at gene, genome, cellular and tissue level, relate the physical features of the environment to the structure of populations, communities, and ecosystems, Will be able to conceive the idea of artificial propagation of plants via vegetative methods and to find a livelihood via establishing miniature plant nurseries. Gain the knowledge of Chemistry through theory and practicals: able to explain nomenclature,
Botany- Chemistry- Bio-Technology	PSO3	stereochemistry, structures, reactivity, and mechanism of the chemical reactions; identify chemical formulae and solve numerical problems; use modern chemical tools, models, chem-draw, charts, and equipment; know structure-activity relationship; Understand good laboratory practices and safety; Develop research-oriented skills, will learn to handle the sophisticated instruments/equipment Understand the basic life processes, metabolic activities, and handling of equipment, identification of appropriate experiments for research, comprehensive understanding of chemical basis of heredity, acquiring skills in genetic methodologies, its applications in other areas, systemic understanding of molecular & immunologic responses, awareness of useful/harmful agents & its impact on human genome, on completion students would be able to
	PSO4	appreciate and execute professional roles biotechnology professionals and employees in various industries, regulators, researchers, educators Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Horticulture/ Miniature plant nurseries/ Mushroom cultures/Bio-Fertilizers etc.

	1	,
Botany- Psychology (MOOCs) Bio-Technology	PSO2 PSO3	Acquire critical evaluation of ideas and arguments by collecting relevant information about the plants, so as to recognize their position in the classification systems and at phylogenetic level, Will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms, Will be able to explain how Plants function at gene, genome, cellular and tissue level, relate the physical features of the environment to the structure of populations, communities, and ecosystems, Will be able to conceive the idea of artificial propagation of plants via vegetative methods and to find a livelihood via establishing miniature plant nurseries. Understand the dynamic field of psychology with an overview on traditional and contemporary approaches to psychology, get orientation about the biological basis of behaviour and sensory experiences, acquire knowledge on basic cognitive concepts of attention, perception, Memory, thinking, reasoning and learning, get acquainted with the concepts of motivation and understand the development of emotions, get aware of concept of Intelligence, development of tests and types of tests used to assess intelligence Understand the basic life processes, metabolic activities, and handling of equipment, identification of appropriate experiments for research, comprehensive understanding of chemical basis of heredity, acquiring skills in genetic methodologies, its applications in other areas, systemic understanding of molecular & immunologic responses, awareness of useful/harmful agents & its impact on human genome, on completion students would be able to appreciate and execute professional roles biotechnology professionals and employees in various industries, regulators, researchers, educators Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or ind
	PSO1	Mushroom cultures/Bio-Fertilizers etc. Acquire critical evaluation of ideas and arguments by
	PSO2	collecting relevant information about the plants, so as to recognize their position in the classification systems and at phylogenetic level, Will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms, Will be able to explain how Plants function at gene, genome, cellular and tissue level, relate the physical features of the environment to the structure of populations, communities, and ecosystems, Will be able to conceive the idea of artificial propagation of plants via vegetative methods and to find a livelihood via establishing miniature plant nurseries. Gain foundational knowledge of the diversity in fauna, especially local fauna, evolution patterns, features of morphology, will be able to analyze the relationship

•		
		between plants and animals, global
		environmental issues, extinct species and realize the
		rights and responsibilities of individuals in the
		conservation of our biosphere, understand the basic
Potomy		concepts in cell biology, genetics, evolution, immunology,
Botany- Zoology-		physiology etc., understand the application of biological sciences in aquaculture, apiculture, sericulture, fisheries
Applied Nutrition		and skill based knowledge for source of income and self-
Applied Nutrition		employment
		Will be able to demonstrate an understanding of
	PSO3	fundamentals of biochemistry, acquire basic knowledge
		on structure, composition, nutritive value of various
		foods, understand the basics of meal planning and
		special diets based on the conditions of diseases, get
		equipped with the basic knowledge of clinical Dietetics,
		hospital administration, food hygiene and will be able to use in institutes wherever necessary, will develop
		analytical thinking in diet calculations and preparation of
		therapeutic diets.
		Will be able to perform short research projects or provide
	PSO4	assistance in clinical trials, research using the techniques
		and skills acquired in the program and will be equipped
		to take up a suitable position in academia or industry,
		and to pursue research or a career in entrepreneurship through Horticulture/ Miniature plant nurseries/
		Mushroom cultures/Bio-Fertilizers/Clinical Dietics etc.
	PSO1	Acquire critical evaluation of ideas and arguments by
		collecting relevant information about the plants, so as to
		recognize their position in the classification systems and
		at phylogenetic level, Will be able to compare and
		contrast the characteristics of the different groups of
		plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms, Will be able to explain
		how Plants function at gene, genome, cellular and tissue
		level, relate the physical features of the environment to
		the structure of populations, communities, and
		ecosystems, Will be able to conceive the idea of artificial
		propagation of plants via vegetative methods and to find
		a livelihood via establishing miniature plant nurseries.
	PSO2	Gain foundational knowledge of the diversity in fauna, especially local fauna, evolution patterns, features of
	P302	morphology, will be able to analyze the relationship
		between plants and animals, global
		environmental issues, extinct species and realize the
		rights and responsibilities of individuals in the
		conservation of our biosphere, understand the basic
		concepts in cell biology, genetics, evolution, immunology,
		physiology etc,. understand the application of biological sciences in aquaculture, apiculture, sericulture, fisheries
		and skill based knowledge for source of income and self-
Potany		employment
Botany- Zoology-		Understand the basic life processes, metabolic activities,
Bio-Technology	PSO3	and handling of equipment, identification of appropriate
		experiments for research, comprehensive understanding
		of chemical basis of heredity, acquiring skills in genetic methodologies, its applications in other areas, systemic
		understanding of molecular & immunologic responses,
		anacistanding of molecular & infinitiologic responses,

	PSO4	awareness of useful/harmful agents & its impact on human genome, on completion students would be able to appreciate and execute professional roles biotechnology professionals and employees in various industries, regulators, researchers, educators Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Horticulture/ Miniature plant nurseries/Mushroom cultures/Bio-Fertilizers etc.
	PSO1	Acquire critical evaluation of ideas and arguments by collecting relevant information about the plants, so as to recognize their position in the classification systems and at phylogenetic level, Will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms, Will be able to explain how Plants function at gene, genome, cellular and tissue level, relate the physical features of the environment to the structure of populations, communities, and ecosystems, Will be able to conceive the idea of artificial propagation of plants via vegetative methods and to find a livelihood via establishing miniature plant nurseries. Gain foundational knowledge of the diversity in fauna, especially local fauna, evolution patterns, features of morphology, will be able to analyze the relationship between plants and animals, global environmental issues, extinct species and realize the rights and responsibilities of individuals in the conservation of our biosphere, understand the basic concepts in cell biology, genetics, evolution, immunology,
Botany- Zoology- Chemistry	PSO3	physiology etc. understand the application of biological sciences in aquaculture, apiculture, sericulture, fisheries and skill based knowledge for source of income and self-employment Gain the knowledge of Chemistry through theory and practicals: able to explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions; identify chemical formulae and solve numerical problems; use modern chemical tools, models, chem-draw, charts, and equipment; know structure-activity relationship; Understand good laboratory practices and safety; Develop research-
	PSO4	oriented skills, Will learn to handle, operate the sophisticated instruments/equipment Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Horticulture/ Miniature plant nurseries/ Mushroom cultures/Bio-Fertilizers etc.

	_	
Botany- Zoology- Computer Science	PSO1	Acquire critical evaluation of ideas and arguments by collecting relevant information about the plants, so as to recognize their position in the classification systems and at phylogenetic level, Will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms, Will be able to explain how Plants function at gene, genome, cellular and tissue level, relate the physical features of the environment to the structure of populations, communities, and ecosystems, Will be able to conceive the idea of artificial propagation of plants via vegetative methods and to find a livelihood via establishing miniature plant nurseries. Gain foundational knowledge of the diversity in fauna, especially local fauna, evolution patterns, features of morphology, will be able to analyze the relationship between plants and animals, global environmental issues, extinct species and realize the rights and responsibilities of individuals in the conservation of our biosphere, understand the basic concepts in cell biology, genetics, evolution, immunology, physiology etc, understand the application of biological sciences in aquaculture, apiculture, sericulture, fisheries and skill based knowledge for source of income and self-employment Understand the essential computer parts and their importance; distinguish different input and output devices and connecting peripheral devices, understand the advantages and characteristics of different mediums of data storage, can perform some simple trouble shooting, understand different of operating systems, basic programming theories, techniques, and algorithms, to use the MS-Office and C – Programming. Will be able to perform short research projects or provide
	PSO4	Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Horticulture/ Miniature plant nurseries etc.
	PSO1	Acquire critical evaluation of ideas and arguments by
Botany-	PSO2	collecting relevant information about the plants, so as to recognize their position in the classification systems and at phylogenetic level, Will be able to compare and contrast the characteristics of the different groups of plants such as algae, fungi, bryophytes, pteridophytes, gymnosperms and angiosperms, Will be able to explain how Plants function at gene, genome, cellular and tissue level, relate the physical features of the environment to the structure of populations, communities, and ecosystems, Will be able to conceive the idea of artificial propagation of plants via vegetative methods and to find a livelihood via establishing miniature plant nurseries. Gain foundational knowledge of the diversity in fauna, especially local fauna, evolution patterns, features of
Zoology- Psychology(MOOCs)		morphology, will be able to analyze the relationship between plants and animals, global environmental issues, extinct species and realize the

	PSO3	rights and responsibilities of individuals in the conservation of our biosphere, understand the basic concepts in cell biology, genetics, evolution, immunology, physiology etc, understand the application of biological sciences in aquaculture, apiculture, sericulture, fisheries and skill based knowledge for source of income and self-employment Understand the dynamic field of psychology with an overview on traditional and contemporary approaches to psychology, get orientation about the biological basis of behaviour and sensory experiences, acquire knowledge on basic cognitive concepts of attention, perception, Memory, thinking, reasoning and learning, get acquainted with the concepts of motivation and understand the development of emotions, get aware of
	PSO4	concept of Intelligence, development of tests and types of tests used to assess intelligence Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Horticulture/ Miniature plant nurseries/ Counselling centers etc.
	PSO1	Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect of microorganisms on everyday life, health, food, sanitation, genetic engineering, understand the fundamental biochemical principles, such as the structure/function of biomolecules and carryout experiments, analyze the basic concepts of hereditary and the process of inheritance, understand the functions and molecular structures of DNA and RNA and how they serve as genetic information and concept of plasmids and transposons. Will be able to demonstrate an understanding of fundamental biochemical principles such as structure and function of biomolecules, metabolic pathways, acquire basic knowledge on fundamentals of microbiology, enzymology, immunology, molecular biology, endocrinology and genetic engineering, get equipped with the basic biochemical tools and standard operation
Micro Biology- Bio-Chemistry Applied Nutrition	PSO3	procedures and will be able to use in institutes wherever necessary, will develop analytical thinking in execution of biochemical experiments and data interpretation. Will be able to demonstrate an understanding of fundamentals of biochemistry, acquire basic knowledge on structure, composition, nutritive value of various foods, understand the basics of meal planning and special diets based on the conditions of diseases, get equipped with the basic knowledge of clinical Dietetics, hospital administration, food hygiene and will be able to use in institutes wherever necessary, will develop analytical thinking in diet calculations and preparation of therapeutic diets. Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques

		and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Bio-chemists/Clinical dietetics/Clinical
		Diagnostics etc.
	PSO1	Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect of microorganisms on everyday life, health, food, sanitation, genetic engineering, understand the fundamental biochemical principles, such as the structure/function of biomolecules and carryout experiments, analyze the basic concepts of hereditary and the process of inheritance, understand the functions and molecular structures of DNA and RNA and how they serve as genetic information and concept of plasmids and transposons.
Micro Biology- Bio-Chemistry- Bio-Technology	PSO2	Able to demonstrate an understanding of fundamental biochemical principles such as structure and function of biomolecules, metabolic pathways, acquire basic knowledge on fundamentals of microbiology, enzymology, immunology, molecular biology, endocrinology and genetic engineering, get equipped with the basic biochemical tools and standard operation procedures and will be able to use in institutes wherever necessary, will develop analytical thinking in execution of biochemical experiments and data interpretation. Understand the basic life processes, metabolic activities,
	PSO3	and handling of equipment, identification of appropriate experiments for research, comprehensive understanding of chemical basis of heredity, acquiring skills in genetic methodologies, its applications in other areas, systemic understanding of molecular & immunologic responses, awareness of useful/harmful agents & its impact on human genome Will be able to perform short research projects or provide
	PSO4	assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Bio-chemists/Bio-fertilizers/ Clinical Diagnostics etc.
	PSO1	Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect of microorganisms on everyday life, health, food, sanitation, genetic engineering, understand the fundamental biochemical principles, such as the structure/function of biomolecules and carryout experiments, analyze the basic concepts of hereditary and the process of inheritance, understand the functions
	PSO2	and molecular structures of DNA and RNA and how they serve as genetic information and concept of plasmids and transposons. Will be able to demonstrate an understanding of fundamental biochemical principles such as structure and function of biomolecules, metabolic pathways, acquire basic knowledge on fundamentals of microbiology, enzymology, immunology, molecular biology,

Micro Biology- Bio-Chemistry- Chemistry	PSO3	endocrinology and genetic engineering, get equipped with the basic biochemical tools and standard operation procedures and will be able to use in institutes wherever necessary, will develop analytical thinking in execution of biochemical experiments and data interpretation. Gain the knowledge of Chemistry through theory and practicals: able to explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions; identify chemical formulae and solve numerical problems; use modern chemical tools, models, chem-draw, charts and equipment; know structure-activity relationship; Understand good laboratory practices and safety; Develop research-oriented skills, Make aware and handle the sophisticated
	PSO4	instruments/equipment Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Bio-chemists/Bio-fertilizers/Clinical Diagnostics etc.
	PSO1	Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect of microorganisms on everyday life, health, food, sanitation, genetic engineering, understand the fundamental biochemical principles, such as the structure/function of biomolecules and carryout experiments, analyze the basic concepts of hereditary and the process of inheritance, understand the functions and molecular structures of DNA and RNA and how they serve as genetic information and concept of plasmids and transposons. Will be able to demonstrate an understanding of fundamental biochemical principles such as structure and function of biomolecules, metabolic pathways, acquire basic knowledge on fundamentals of microbiology, enzymology, immunology, molecular biology, enzymology and genetic engineering, get equipped with the basic biochemical tools and standard operation procedures and will be able to use in institutes wherever necessary, will develop analytical thinking in execution of
Micro Biology- Bio-Chemistry- Computer Science	PSO3	biochemical experiments and data interpretation. Understand the essential computer parts and their importance; distinguish different input and output devices and connecting peripheral devices, understand the advantages and characteristics of different mediums of data storage, can perform some simple trouble shooting, understand different of operating systems, basic programming theories, techniques, and algorithms, to use the MS-Office and C - Programming Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped
		to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Bio-chemists/Bio-fertilizers/Clinical Diagnostics

		etc.
Micro Biology- Chemistry- Applied Nutrition	PSO1	Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect of microorganisms on everyday life, health, food, sanitation, genetic engineering, understand the fundamental biochemical principles, such as the structure/function of biomolecules and carryout experiments, analyze the basic concepts of hereditary and the process of inheritance, understand the functions and molecular structures of DNA and RNA and how they serve as genetic information and concept of plasmids and transposons. Gain the knowledge of Chemistry through theory and practicals: able to explain nomenclature, stereochemistry, structures, reactivity and mechanism of the chemical reactions; identify chemical formulae and solve numerical problems; use modern chemical tools, models, chem-draw, charts and equipment; know
	PSO3	structure-activity relationship; Understand good laboratory practices and safety; Develop research-oriented skills, Will learn to handle, operate the sophisticated instruments/equipment. Will be able to demonstrate an understanding of fundamentals of biochemistry, acquire basic knowledge on structure, composition, nutritive value of various foods, understand the basics of meal planning and special diets based on the conditions of diseases, get equipped with the basic knowledge of clinical Dietetics, hospital administration, food hygiene and will be able to use in institutes wherever necessary, will develop analytical thinking in diet calculations and preparation of therapeutic diets.
	PSO4	Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Bio-chemists/Clinical Diagnostics/Clinical Dietetics etc.
	PSO1	Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect
		of microorganisms on everyday life, health, food,
		sanitation, genetic engineering, understand the fundamental biochemical principles, such as the
		fundamental biochemical principles, such as the structure/function of biomolecules and carryout
		experiments, analyze the basic concepts of hereditary
		and the process of inheritance, understand the functions
		and molecular structures of DNA and RNA and how they
		serve as genetic information and concept of plasmids and
	L	transposons.

Micro Biology- Chemistry- Bio-Technology	PSO2	Gain the knowledge of Chemistry through theory and practicals: able to explain nomenclature, stereochemistry, structures, reactivity and mechanism of the chemical reactions; identify chemical formulae and solve numerical problems; use modern chemical tools, models, chem-draw, charts and equipment; know structure-activity relationship; Understand good laboratory practices and safety; Develop research-oriented skills, Will learn to handle, operate the sophisticated instruments/equipment. Understand the basic life processes, metabolic activities, and handling of equipment, identification of appropriate experiments for research, comprehensive understanding of chemical basis of heredity, acquiring skills in genetic methodologies, its applications in other areas, systemic understanding of molecular & immunologic responses, awareness of useful/harmful agents & its impact on human genome, on completion students would be able to
	PSO4	appreciate and execute professional roles as biotechnology professionals and employees in various industries, regulating agencies Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Bio-chemists/Bio-fertilizers/Clinical Diagnostics etc.
	PSO2	Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect of microorganisms on everyday life, health, food, sanitation, genetic engineering, understand the fundamental biochemical principles, such as the structure/function of biomolecules and carryout experiments, analyze the basic concepts of hereditary and the process of inheritance, understand the functions and molecular structures of DNA and RNA and how they serve as genetic information and concept of plasmids and transposons. Gain foundational knowledge of the diversity in fauna, especially local fauna, evolution patterns, features of morphology, will be able to analyze the relationship between plants and animals, global environmental issues, extinct species and realize the rights and responsibilities of individuals in the conservation of our biosphere, understand the basic concepts in cell biology, genetics, evolution, immunology, physiology etc, understand the application of biological sciences in agus culture, aniculture, soriculture, fisherios
Micro Biology- Zoology- Applied Nutrition	PSO3	sciences in aquaculture, apiculture, sericulture, fisheries and skill based knowledge for source of income and self-employment Will be able to demonstrate an understanding of fundamentals of biochemistry, acquire basic knowledge on structure, composition, nutritive value of various foods, understand the basics of meal planning and special diets based on the conditions of diseases, get equipped with the basic knowledge of clinical Dietetics,

	PSO4	hospital administration, food hygiene and will be able to use in institutes wherever necessary, will develop analytical thinking in diet calculations and preparation of therapeutic diets. Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Fisheries/Sericulture/Clinical Diagnostics/Clinical Dietetics etc.
Micro Biology- Zoology- Bio-Technology	PSO1	Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect of microorganisms on everyday life, health, food, sanitation, genetic engineering, understand the fundamental biochemical principles, such as the structure/function of biomolecules and carryout experiments, analyze the basic concepts of hereditary and the process of inheritance, understand the functions and molecular structures of DNA and RNA and how they serve as genetic information and concept of plasmids and transposons. Gain foundational knowledge of the diversity in fauna, especially local fauna, evolution patterns, features of morphology, will be able to analyze the relationship between plants and animals, global environmental issues, extinct species and realize the rights and responsibilities of individuals in the conservation of our biosphere, understand the basic concepts in cell biology, genetics, evolution, immunology,
	PSO3	physiology etc, understand the application of biological sciences in aquaculture, apiculture, sericulture, fisheries and skill based knowledge for source of income and self-employment Understand the basic life processes, metabolic activities, and handling of equipment, identification of appropriate experiments for research, comprehensive understanding of chemical basis of heredity, acquiring skills in genetic methodologies, its applications in other areas, systemic understanding of molecular & immunologic responses, awareness of useful/harmful agents & its impact on human genome, on completion students would be able to
	PSO4	appreciate and execute professional roles biotechnology professionals and employees in various industries, regulating agencies Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Fisheries/Sericulture/Clinical Diagnostics/Biofertilizers etc.

Micro Biology- Zoology- Chemistry	PSO2	Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect of microorganisms on everyday life, health, food, sanitation, genetic engineering, understand the fundamental biochemical principles, such as the structure/function of biomolecules and carryout experiments, analyze the basic concepts of hereditary and the process of inheritance, understand the functions and molecular structures of DNA and RNA and how they serve as genetic information and concept of plasmids and transposons. Gain foundational knowledge of the diversity in fauna, especially local fauna, evolution patterns, features of morphology, will be able to analyze the relationship between plants and animals, global environmental issues, extinct species and realize the rights and responsibilities of individuals in the conservation of our biosphere, understand the basic concepts in cell biology, genetics, evolution, immunology, physiology etc, understand the application of biological sciences in aquaculture, apiculture, sericulture, fisheries and skill based knowledge for source of income and self-employment. Gain the knowledge of Chemistry through theory and practicals: able to explain nomenclature, stereochemistry, structures, reactivity and mechanism of the chemical reactions; identify chemical formulae and solve numerical problems; use modern chemical tools, models, chem-draw, charts and equipment; know structure-activity relationship; Understand good laboratory practices and safety; Develop researchoriented skills, Will learn to handle, operate the sophisticated instruments/equipment. Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship
		through Fisheries/Sericulture/Bio-chemists/Clinical Diagnostics etc.
	PSO1	Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect of microorganisms on everyday life, health, food, sanitation, genetic engineering, understand the fundamental biochemical principles, such as the structure/function of biomolecules and carryout experiments, analyze the basic concepts of hereditary and the process of inheritance, understand the functions and molecular structures of DNA and RNA and how they serve as genetic information and concept of plasmids and transposons. Gain foundational knowledge of the diversity in fauna,
Micro Biology- Zoology- Computer Science		especially local fauna, evolution patterns, features of morphology, will be able to analyze the relationship between plants and animals, global environmental issues, extinct species and realize the rights and responsibilities of individuals in the

	1	
	PSO3	conservation of our biosphere, understand the basic concepts in cell biology, genetics, evolution, immunology, physiology etc, understand the application of biological sciences in aquaculture, apiculture, sericulture, fisheries and skill based knowledge for source of income and self-employment. Understand the essential computer parts and their importance; distinguish different input and output devices and connecting peripheral devices, understand the advantages and characteristics of different mediums of data storage, can perform some simple trouble shooting, understand different of operating systems, basic programming theories, techniques and algorithms, to use the MS-Office and C – Programming Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Bio-chemists/Bio-fertilizers/Clinical Diagnostics etc.
Micro Biology- Zoology- Psychology(MOOCs)	PSO1	Understand nature of science and scientific enquiries, and have mastered a set of fundamental skills and effect of microorganisms on everyday life, health, food, sanitation, genetic engineering, understand the fundamental biochemical principles, such as the structure/function of biomolecules and carryout experiments, analyze the basic concepts of hereditary and the process of inheritance, understand the functions and molecular structures of DNA and RNA and how they serve as genetic information and concept of plasmids and transposons. Gain foundational knowledge of the diversity in fauna, especially local fauna, evolution patterns, features of morphology, will be able to analyze the relationship between plants and animals, global environmental issues, extinct species and realize the rights and responsibilities of individuals in the conservation of our biosphere, understand the basic concepts in cell biology, genetics, evolution, immunology, physiology etc, understand the application of biological sciences in aquaculture, apiculture, sericulture, fisheries
	PSO3	and skill based knowledge for source of income and self- employment Understand the dynamic field of psychology with an overview on traditional and contemporary approaches to psychology, get orientation about the biological basis of behaviour and sensory experiences, acquire knowledge on basic cognitive concepts of attention, perception, Memory, thinking, reasoning and learning, get acquainted with the concepts of motivation and understand the development of emotions, get aware of concept of Intelligence, development of tests and types of tests used to assess intelligence Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques

	to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Fisheries/Sericulture/Clinical Diagnostics/Clinical Counseling etc.
PSO1	Gain foundational knowledge of the diversity in fauna, especially local fauna, evolution patterns, features of morphology, will be able to analyze the relationship between plants and animals, global environmental issues, extinct species and realize the rights and responsibilities of individuals in the conservation of our biosphere, understand the basic concepts in cell biology, genetics, evolution, immunology, physiology etc, understand the application of biological sciences in aquaculture, apiculture, sericulture, fisheries and skill based knowledge for source of income and self-employment. Gain the knowledge of Chemistry through theory and practicals: able to explain nomenclature, stereochemistry, structures, reactivity, and mechanism of the chemical reactions; identify chemical formulae and solve numerical problems; use modern chemical tools, models, chem-draw, charts and equipment; know structure-activity relationship; Understand good laboratory practices and safety; Develop research-oriented skills, Will learn to handle, operate the sophisticated instruments/equipment

Zoology- Chemistry- Applied Nutrition	PSO3	Will be able to demonstrate an understanding of fundamentals of biochemistry, acquire basic knowledge on structure, composition, nutritive value of various foods, understand the basics of meal planning and special diets based on the conditions of diseases, get equipped with the basic knowledge of clinical Dietetics, hospital administration, food hygiene and will be able to use in institutes wherever necessary, will develop analytical thinking in diet calculations and preparation of
	PSO4	therapeutic diets. Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Fisheries/Sericulture/Bio-chemists/Clinical Dietetics etc.
Zoology- Chemistry- Bio-Technology	PSO2	Gain foundational knowledge of the diversity in fauna, especially local fauna, evolution patterns, features of morphology, will be able to analyze the relationship between plants and animals, global environmental issues, extinct species and realize the rights and responsibilities of individuals in the conservation of our biosphere, understand the basic concepts in cell biology, genetics, evolution, immunology, physiology etc, understand the application of biological sciences in aquaculture, apiculture, sericulture, fisheries and skill based knowledge for source of income and self-employment Gain the knowledge of Chemistry through theory and practicals: able to explain nomenclature, stereochemistry, structures, reactivity and mechanism of the chemical reactions; identify chemical formulae and solve numerical problems; use modern chemical tools, models, chem-draw, charts and equipment; know structure-activity relationship; Understand good laboratory practices and safety; Develop research-oriented skills, Will learn to handle, operate the sophisticated instruments/equipment. Understand the basic life processes, metabolic activities, and handling of equipment, identification of appropriate experiments for research, comprehensive understanding of chemical basis of heredity, acquiring skills in genetic methodologies, its applications in other areas, systemic understanding of molecular & immunologic responses, awareness of useful/harmful agents & its impact on human genome, Will be able to perform short research projects or provide assistance in clinical trials, research using the techniques and skills acquired in the program and will be equipped to take up a suitable position in academia or industry, and to pursue research or a career in entrepreneurship through Fisheries/Sericulture/Bio-chemists/Bio-fertilizers etc.